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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/443,250 11/12/99 EDEM

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WM01/0302

EXAMINER

NGLIYEN, P

ART UNIT

PAPER NUMBER

2663

DATE MAILED:

03/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/443,250	EDEM ET AL.
	Examiner	Art Unit
	Phuongchau Ba Nguyen	2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on re-issue application in 11-12-1999.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-240 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-72 is/are allowed.
- 6) Claim(s) 73-240 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

- 15) Notice of References Cited (PTO-892)
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 18) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 19) Notice of Informal Patent Application (PTO-152)
- 20) Other: \_\_\_\_\_

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1. U.S. Patent No. 5,687,174 was issued on November 11, 1997. Therefore, a maintenance fee will be due at 3.5 years which will be May 11, 2001.

2. Changes were made to the Patent on January 12, 1998 by Certificate of Corrections (claims 49 and 54 were corrected) prior to the filing of the issue. These changes must be incorporated in the reissue application without bracketing or underlining.

It is noted that claims 49 and 54 have not been corrected as indicated in the Certificate of Corrections. Also, claim 126 is similarly to claim 54, thus claim 126 should be corrected as well.

3. The reissue oath/declaration filed with this application is defective because it fails to identify at least one error which is relied upon to support the reissue application. See 37 CFR 1.175(a)(1) and MPEP § 1414.

Claims 1-240 are rejected as being based upon a defective reissue Oath/Declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the Oath/Declaration is set forth in the discussion above in this Office action.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make

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and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 148, 155, 162, 169, 176, 184, 196, 208, 220, 232, 149, 156, 163, 170, 177, 185, 197, 209, 221, 233 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added material which is not supported by the original disclosure is as follows: "first protocol at first point in time" and "second protocol at second point in time" [claims 176, 184, 196, 208, 220, 232]; and "protocol is determined automatically"[claims 149, 156, 163, 170, 177, 185, 197, 209, 221, 233]. Applicant is required to cancel the new matter in the reply to this Office Action.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.  
7. Claim 168 recites the limitation "the physical medium" in line 1. There is insufficient antecedent basis for this limitation in the claim. Should claim 168 depend on claim 167 instead of claim 166.

8. Claims 145, 152, 159, 166, 173, 181, 193, 205, 217, 229 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to

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particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear what is meant by "best or desired manner".

9. Claims 147,154, 161, 168, 175, 183,195, 207, 219, 231, 189, 201, 213, 225, 237 are objected as improper Markush claims since the word "or' in line 3 should be changed to --and--; see MPEP 2173.05(h).

10. Claims 74-87, 145-151, 89-95, 152-158, 97-128, 159-165, 130-143, 166-170, 181-203, 205-215, 217-227 and 229-239 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

11. Claims 73-240 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening

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aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

As to claims 73,144, 180, 192, 204, 216, 228 and 240, these reissue claims, as compared to the patent claims 1-72, broaden the patent claims by omitting the limitation of "including a format for a data transmission" as recited in the patent independent claims. In the Amendment of 04/26/95 (paper # 13 of application Serial No. 08/432,143), the omitted limitation was added to the independent claims 22, 36 and 45 (which became patent claims 1, 16 and 24) for the purposes of making the claims allowable. The omitted limitation was also argued at page 26 of said Amendment. Furthermore, in the Office action of 04/01/96 (paper # 18), the examiner's reasons for allowance stated that it was the limitation of "including a format for a data transmission" which distinguished over the cited prior art references. Clearly, the record shows that the reissue claims impermissibly recapture what applicants deliberately surrendered in original prosecution.

As to claims 145-179, 181-191, 193-203, 205-215, 217-227 and 229-239, these reissue claims are broader in an aspect germane to a prior art rejection, as discussed

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above, but narrower in another aspect completely unrelated to the rejection; thus the capture rule bars these reissue claims.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 73, 87-88, 96-99, 113-114, 129-130, 144, 180, 192, 204, 216, 228, 240 are rejected under 35 U.S.C. 102(b) as being anticipated by Greszczuk.

In U.S. patent No. 4,931,250 Greszczuk discloses a multimode modem including a signal detection circuit 24 (a protocol identifying circuit), modulators 12 14 (transmitters), and demodulators 20 22 (receivers). Working as an answering modem (first endpoint), the multimode modem sends a tone at 2250 Hz (first endpoint protocol signal indicating the V. 22bis protocol) to a calling modem (second end point). If the answering multimode modem receives a tone at 1800 Hz (second endpoint protocol signal indicating the V.32 protocol) from the calling modem, the answering modem will follow the V.32 protocol. See col. 3, lines 19-35, Fig. 1, 2 and 4.

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***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 74-75, 81-82, 89, 93, 100-102, 115-116, 131-132, 138-140, 145-147, 150-154, 157-161, 164-168, 171-175, 178-179, 181-183, 186-191, 193-195, 198-203, 205-207, 210-215, 217-219, 222-227, 229-231, 234-239 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greszczuk [4,931,250] in view Hamada et al [4,766,599].

**Regarding to claims 74-75, 81-82, 89, 93, 101-102, 115-116, 131-132, 138-140:**

Greszczuk does not mention about transmitting data in the form of packets and frames. However, as evidenced by Hamada et al., it is common practice in the art that a long message is transmitted in a sequence of frames or packets in order to avoid retransmitted of the whole message in noise deteriorates a portion of the message.

Hamada discloses frames for conveying video or data [column 3, lines 53-65]. Therefore, it would have been obvious to a skilled artisan to format data transmitted by the modem taught by Greszczuk in order to avoid unnecessary retransmission.

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**Regarding to claim 100:**

Greszczuk differs from the claimed invention in that he does not specifically recite a series of 100 nanosecond pulse. To use a signal consisting of a pulse having a plurality of pulses would have been obvious to a skilled artisan because this is imply a matter of selecting signals having suitable shapes for transmission and combating noise.

**Regarding to claims 145, 152, 159, 166, 173, 181, 193, 205, 217, 229:**

Although Greszczuk does not explicitly disclose that the first endpoint and the second endpoint are configured to operate in a best or desired manner. /i<

But it would have been obvious to a skilled artisan to configure a multi-mode modem in Greszczuk system for operating in a best or desired manner by automatically selecting a correct mode [i.e., V.32, V.22bis, V.22—modem type] so that a modem with a mode that is supported by the can adapt to internetwork explicitly disclosed in column 1, lines 1-13, and column 2, lines 1-2 of Greszczuk.

**Regarding to claims 146, 153, 160, 167, 174, 182, 194, 206, 218, 230; 147, 154, 161, 168, 175, 183, 195, 207, 219, 231; and 189, 201, 213, 225, 237:**

Although Greszczuk does not explicitly disclose that the first endpoint and the second endpoint are coupled together over at least one physical medium. The physical

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medium comprises one or more physical media selected from the group consisting of twisted pair media, coaxial cable media or fiber optic media.

Greszczuk does disclose in figure 1 a multi-mode modem [second endpoint as claimed] connected a telephone line [physical medium as claimed, i.e., twisted pair cable is a common usage of transmission media], which is connected to a public switched telephone network [inherent feature--first endpoint as claimed].

Therefore, it would have been obvious to a skilled artisan to implement different type of media such as coaxial cable or fiber optic to the telephone line for carrying high-speed data and in CATV. This feature is well known in the art for transporting information from one point to another in high bandwidth, relatively low cost, low power consumption, small space needs, total insensitivity to electromagnetic interference and great insensitivity to being bugged.

**Regarding to claims 150, 157, 164, 171, 178, 186, 198, 210, 222, 234; 151, 158, 165, 172, 179, 187, 199, 211, 223, 235; 188, 200, 212, 224, 236; 190, 202, 214, 226, 238; and 191, 203, 215, 227, 239:**

Although Greszczuk does not explicitly disclose that data communication between the first endpoint and the second endpoint include isochronous data comprising telephone data and/or video data.

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Hamada discloses transmission of video signal, image and telephone data in column 2, lines 18-66, and column 3, lines 40-52. Hamada further discloses that data having different traffic characteristics [i.e., telephone/image/video data] can coexist on the same transmission system in column 2, line 63 to column 3 lines 52. Hamada also discloses that a variety of data processors 11-18 in figure 1 such as computers or terminals for transferring data among themselves in column 2, lines 20-27.

Therefore, it would have been obvious to a skilled artisan to include the transmission of isochronous data comprising telephone data and/or video data via the telephone line in Greszczuk system because it is common practice in the art to use multi-mode modem/processors for transmitting and receiving either telephone data or video/image signals on a transmission line as explicitly disclosed in Hamada at column 2, lines 50-63.

***Allowable Subject Matter***

16. Claims 76-80, 83-86, 90-92, 94-95, 103-112, 117-128, 133-137, 141-143 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 703-305-0093. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-9051 for regular communications and 703-308-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

*PN*  
Phuongchau Ba Nguyen  
Examiner  
Art Unit 2663

February 27, 2001

*Chau T. Nguyen*  
CHAU NGUYEN  
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